

REMARKS

Claims 1 - 18 are pending in the present application. Claims 19 - 21 are canceled.

In section 3 of the Office Action, claims 1 - 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,544,347 to Yanai et al. (hereinafter the "the '347 patent") in view of U.S. Patent No. 5,742,792 to Yanai et al. (hereinafter "the '792 patent"). The application contains three independent claims, namely claims 1, 7 and 13. Applicant amended the independent claims to clarify a novel aspect that is neither described nor suggested by the references.

Claim 1 provides a method for enabling improved access to data stored in a log of a computer memory system that has multiple copies of the log. The method includes a) responding to a process request to read a log, by determining a parameter indicative of demand for access to read one of the copies of the log, and b) assigning the process to another of the copies of the log if the parameter has reached a threshold value.

The '347 patent relates to a system and method for providing and maintaining a copy or mirror of a data storage disk on a secondary storage system, remote from a primary storage system (Abstract and col. 1, lines 27 - 31). The system provides "copying of data from a primary data storage system to a physically remote secondary data storage system" (col. 6, lines 16-18).

Referring to FIG. 1 of the '347 patent, a system 10 is described as having data on a primary data storage system 14, and copying the data to a secondary data storage system 46. The copy of the data is apparently not available from secondary data storage system 46 until after system 10 has completed its task of copying the data from primary data storage system 14. Moreover, as the copy of the data is not yet available from secondary data storage system 46, the data cannot yet be read from secondary data storage system 46 until after system 10 has completed its task.

Whereas the data cannot be read from secondary data storage system 46 until after system 10 has completed its task, a process request to read data cannot be assigned to secondary data storage system 46 until after system 10 has completed its task. Consequently, the '347 patent neither describes nor suggests (1) responding to a process request to read a log, and (2) assigning the process to another of said copies if said parameter has reached a threshold value, as recited in claim 1.

The '792 patent is a continuation-in-part of the '347 patent and also relates to data mirroring, i.e., the creation of a copy of data (col. 1, lines 23 - 27). More specifically, the '792 patent describes a system that controls storing of primary data, and additionally controls copying of the primary data to a secondary data storage system (col. 2, lines 30 - 35).

The system in the '792 patent, similarly to that in the '347 patent, does not provide for reading data from a secondary data storage system because the data is not yet available on the secondary data storage system until after the system in the '792 patent has completed its task. For example, FIGS. 14 and 15 together provide a flowchart of a routine for migrating a volume. Referring to FIG. 15, box 481, the description at col. 36, lines 15 - 18 states:

Once this copying is done, the migration task is finished. The primary (R1) and the secondary (R2) volumes are in sync, and they contain the same data.

Furthermore, referring to FIG. 15, the box after box 481 states:

Migration is finished, the primary (R1) and secondary (R2) volumes are synchronized, and processing may resume using either of the volumes as a primary volume.

The two preceding quotations make clear that the system of the '792 patent copies data to secondary volume (R2), but that data is not available from the secondary volume (R2) until after the migration routine is completed.

Whereas the data cannot be read from secondary volume (R2) until after the migration routine is completed, a process request to read data cannot be assigned to secondary volume (R2) until after the migration routine is completed. Consequently, the '792 patent neither describes nor suggests (1) responding to a process request to read a log, and (2) assigning the process to another of said copies if said parameter has reached a threshold value, as recited in claim 1.

Applicant respectfully submits that the '347 and '792 patents, whether considered alone or in combination, do not describe or suggest all of the elements of claim 1. As such, claim 1 is patentable over these references.

Independent claims 7 and 13 each include a recital similar to that of claim 1. Thus, claims 7 and 13 are patentable over the references for reasons similar to that of claim 1.

Claims 2 - 6 depend from claim 1, claims 8 - 12 depend from claim 7, and claims 14 - 18 depend from claim 13. Thus, claim 2 - 6, 8 - 12 and 14 - 18 are patentable at least because of their dependence on one of the independent claims.

Claims 19 - 21 are canceled. As such, the rejection is moot with respect to these claims.

Applicant respectfully requests reconsideration and withdrawal of the section 103(a) rejection of claims 1 - 21.

Applicant amended claims 1, 7 and 13 to clarify a novel feature that is neither described nor suggested by the references. Claim 11 is amended to correct a typographical error.

The present application is claiming priority of U.S. Provisional Application Serial No. 60/130,221, filed 20 APR 1999. The Examiner has not yet acknowledged this claim

to priority. Applicant respectfully requests that the Examiner acknowledge this claim to priority in the next Office correspondence.

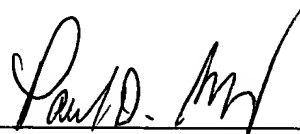
Additionally, the Examiner has not yet indicated whether the drawings are accepted or objected to. Applicant respectfully requests that in the next Office correspondence, the Examiner affirmatively indicate whether the drawings are accepted or objected to.

In view of the foregoing, Applicant respectfully submits that all claims presented in this application patentably distinguish over the prior art. Accordingly, Applicant respectfully requests favorable consideration and that this application be passed to allowance.

Respectfully submitted,

Date

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